


## Exhibit "A" (AF)


Claim 1, line 7, amended to read as follows:

 1.) A multi-thickness filter media comprising a combination of at least two successive adjacent face-to-face thicknesses of selected filter fiber sizes with each thickness having fiber sizes so that the pore size characteristics of one thickness differs from that of an adjacent thickness with said fibers of one thickness being comparatively finer than said fibers of said other thickness and with the fiber sizes and pore sizes of said successive adjacent face-to-face thicknesses of fibers being calculated including factors of thicknesses and relative pore sizes of each layer to take in to account the differences in thickness, porosity, pore and fiber sizes between layers in such an arrangement so that the overall average pore size of the combined successive thicknesses is smaller than that of the average overall pore size of that of the finest fiber thickness, so as to optimize filtration performance efficiency.

Claim 10, line 1, amended to read as follows:

 10.) The filter media of Claim 9, said chemical binding agent being an acrylic binder

Claim 18, line 11, amended to now read:

 18.) A multi-thickness filter media comprising at least three different fiber sizes in successive horizontally extending adjacent face-to-face independent thicknesses of carded, chopped fibers, said carded, chopped fibers of each independent thickness having a combination of fibers and pore size characteristics with the carded, chopped fibers of each independent thickness being substantially opened and aligned, the fiber size characteristics from downstream

toward upstream thicknesses being approximately one to four (1-4), six (6) and at least twenty (20) deniers from downstream finer denier thickness toward said upstream coarser thicknesses, with pore sizes increasing from the finer downstream lower denier thickness toward the coarser upstream higher denier thickness; said adjacent face-to-face thicknesses being bonded by a selected acrylic binder, the carded fibers in said thicknesses being calculated including factors of thicknesses, porosity, pore and fiber sizes of each layer to take in to account the differences in thickness pore and fiber sizes between layers in such an arrangement so that the overall average pore size of that of adjacent successive thicknesses is smaller than that of the average overall pore size of said independent finest fiber thickness calculated by the formulas expressed:

$$\frac{1}{M} = \epsilon_1 \epsilon_{i+1} \dots \epsilon_n \left( \sum_{i=1}^n \frac{1}{M_i} \right)$$

wherein the porosity "e" is the ratio of the pore volume to the total volume of medium, "Σ" is the summation from "i" = 1 to n, and "M" is the mean flow pore diameter of the filter media thicknesses and with the air frazier permeability of said three thicknesses filter medium being expressed by the formula:

$$\frac{1}{v} = \epsilon_1 \epsilon_{i+1} \dots \epsilon_n \left( \sum_{i=1}^n \frac{1}{v_i} \right) \dots \dots \dots 6$$

wherein "v" is air frazier, fluid velocity, in cfm/square foot, the porosity, "e" is the ratio of the pore volume to the total volume of medium; and "Σ" is the summation from "i" = 1 to n.

Claim 19, lines 13-14, amended to now read:

19.) A method of manufacturing filter media comprising: collecting a first independent measured thickness weight of chopped fibers in a mixer-blender zone, said first independent measured thickness weight of chopped fibers being of selected denier and pore size; collecting at least a second independent measured thickness weight of chopped fibers in a mixer-blender zone to be successively joined in overlying face-to-face thicknesses relation with said first measured thickness weight of chopped fibers, said second measured thickness weight of chopped fibers being of selected denier and pore size different from said denier and pore sizes of said first measured thickness weight of chopped fibers with said fibers of one independent thickness being finer than said fibers of said other independent thicknesses; passing said first and second measured thickness weights to a carding zone to open and align said chopped fibers in each said successively joined filter media thicknesses having face-to-face relationship to maximize particulate dirt holding capacity and to increase efficiency with the thicknesses being calculated with an arrangement including factors of thicknesses, pore and fiber sizes of each layer to take in to account the differences in thickness, porosity, pore and fiber sizes between layers in such an arrangement so that the overall average pore size of that of successive face-to-face thicknesses is smaller than that of the average overall pore size of the independent finest fiber thicknesses.

Claim 27, lines 9 and 10, amended to now read:

27.) A method of manufacturing multi-layered filter media comprising: collecting in a mixer-blender zone at least a first and second layer of chopped fibers in separate independent thickness layers, each layer of filter media being of measured weight with at least one layer being of low melt fibers with said fibers of one independent layer being finer than said fibers of

said other independent layer fibers; passing each layer through a carding zone including separate successive carding zone sections for each to open and align the fibers of each layer and to position the first and second layers in adjacent face-to-face relation; passing said adjacent face-to-face layers to a heating zone of sufficient heat to melt bind said layers in fast relation, said carded fibers in said bonded layers being calculated including factors of thicknesses, pore and fiber sizes of each layer to take in to account the differences in thickness, porosity, pore and fiber sizes between layers in such an arrangement so that the overall average pore size of the majority of pores of combined adjacent successive layers is smaller than that of the average overall pore size of the majority of pores of said independent finest fiber thickness layer calculated by formulas expressed:

$$\frac{1}{M} = \epsilon \epsilon_{i+1} \dots \epsilon_n \left( \sum_{i=1}^n \frac{1}{M_i} \right)$$

and

$$\frac{1}{v} = \epsilon \epsilon_{i+1} \dots \epsilon_n \left( \sum_{i=1}^n \frac{1}{v_i} \right) \dots \dots \dots 6$$

with the porosity "ε" is the ratio of pore volume to the total volume of medium, "Σ" is the summation from "i" = 1 to n, and "M" is the mean flow pore diameter of the filter media layers and "v" is fluid velocity in cubic feet per minute over square feet (cfm/sq. ft.).